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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,290	02/28/2002	Toshio Kazama	AB-1215 US	3057

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EXAMINER

TSUKERMAN, LARISA Z

ART UNIT	PAPER NUMBER
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2833

DATE MAILED: 02/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/070,290

Applicant(s)

KAZAMA, TOSHIO

Examiner

Larisa Z Tsukerman

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) ☐ Other:

DETAILED ACTION

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1 - 3 are rejected under 35 U.S.C. 102(a) as being anticipated by DiRenzo (3599326).

In regard to claim 1, DiRenzo discloses a conductive contact member 12 comprising a layer of highly electrically conductive material resistant to solder deposition (see Fig. 6 and Col. 1, lines 71-72 and Col. 3, lines 1-9, 22-24) formed at least over a conductive **contact part** of the contact member (Col. 3, line 32).

In regard to claim 2, the layer formed by plating (Col.3, lines 22-24)

In regard to claim 3, material is gold added with silver- DiRenzo (3599326) teaches a **solder resistant** coating comprises electroplating layer of silver (about .000025 inch) thick on the gold plated pin (Col. 3, lines 1-9, 22-24).

Claim 1 is rejected under 35 U.S.C. 102(a) as being anticipated by Friend (3864004).

In regard to claim 1, Friend discloses a conductive contact member 20 comprising a layer of highly electrically conductive material resistant to solder deposition (see Fig. 5

and Col. 2, lines 58-66) formed at least over a conductive **contact part** of the contact member.

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by Akram et al. (6426642). Akram discloses a conductive contact member 62 comprising a layer of highly electrically conductive material resistant to solder deposition 64 (see Fig. 22-24) formed at least over a conductive **contact part** of the contact member.

Claim Rejections - 35 USC § 103

Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over DiRenzo (3599326).

In regard to claim 4, DiRenzo discloses most of the claimed invention except for that silver is added to gold by 0.01 to 8%.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to add silver to gold in such range, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the

Art Unit: 2833

optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

In regard to claim 6, DiRenzo discloses most of the claimed invention except for that the conductive member made of steel.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the conductive member made of steel, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of design choice. *In re Leshin*, 125 USPQ 416 (CCPA 1960).

Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kazama (5200695) in view of Roth (4511076) and Kister (5720098).

In regard to claim 1, Kazama discloses a conductive contact member 1 for establishing an electrical contact by being applied to an object to be contacted. Kazama does not disclose a layer of highly electrically conductive material resistant to solder deposition formed at least over a conductive **contact part** of the contact member.

Roth teaches a solder resistant/repellant substance applied to portions where it desired the **solder not adhere** (Col. 3, line 26-30) and Kister teaches a coating 94 on the contact portion of contact/probe 10 (see Fig. 8 and Col.6, lines 13-20). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made and for same reason to cover a contact part 22a of Kazama with a layer of conductive material resistant to solder deposition as taught by Roth and Kister.

In regard to **claim 5**, Kazama discloses the contact member 5 comprising a **coil 5 and needle 22a** with a pointed end (see Fig. 5).

Claims 1 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loranger et al. (5791914) in view of Roth (4511076) and Means (3230297).

In regard to **claim 1**, Loranger discloses a conductive contact member 11 for establishing an electrical contact by being applied to an object to be contacted. Loranger does not disclose a layer of highly electrically conductive material resistant to solder deposition formed at least over a conductive **contact part** of the contact member.

Roth teaches a solder resistant/repellant substance applied to portions where it desired the **solder not adhere** (Col. 3, line 26-30) and Means teaches a coating 17 on the spring loop 14, 16 of conductive wire. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made and for same reason to cover a contact part 29 of Fodali with a layer of conductive material resistant to solder deposition as taught by Roth and Means.

In regard to **claim 7**, Loranger, modified by Roth and Means, discloses the contact member is in a form of a **compression coil spring** (see Fig.5), and the solder resistant layer is formed around a coil wire (as taught by Means) forming the coil spring.

In regard to **claim 8**, Loranger, modified by Roth and Means, discloses the contact member is in a form of a compression coil spring having a **contact part 29** in a form of **closely wound turns** of a coil wire (see Fig.5) and the solder resistant layer is formed over an outer surface of the **closely wound turns**.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Swenson (4178058), Fodali (5898299), Sinclair (6341962), Mallet et al (4858074), Woith et al. (5461326), Gross (3745513), Ivory et al. (5656411), Jairazbhoy et al. (5639013).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Larisa Z Tsukerman whose telephone number is (703)-308-6038. The examiner can normally be reached on Monday through Friday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A Bradley can be reached on 703-308-2319. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-308-7722 for regular communications and (703)-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0956.



**THO D. TA
PRIMARY EXAMINER**

L.T.
February 10, 2003